

**Louisiana Department of Environmental Quality (LDEQ)  
Office of Environmental Services**

**STATEMENT OF BASIS**

**City of New Roads  
LA Energy & Power Authority (LEPA) - New Roads Power Plant  
New Roads, Pointe Coupee Parish, Louisiana  
Agency Interest Number: 26328  
Activity Number: PER20080001  
Proposed Permit Number: 2260-00057-V3**

**I. APPLICANT**

**Company:**

LA Energy & Power Authority (LEPA) - New Roads Power Plant  
210 Venture Way  
Lafayette, Louisiana 70507

**Facility:**

City of New Roads  
215 Oak St  
New Roads, Pointe Coupee Parish, Louisiana

**II. FACILITY AND CURRENT PERMIT STATUS**

The New Roads Power Plant generates electricity using six engines (Emission Points C1, C2, C3, C4, C5, and C6). The engines burn natural gas and No. 2 fuel oil. The engines run only in emergency situations or due to operating constraints. The power plant also has three diesel storage tanks and six cooling towers.

The New Roads Power Plant is an existing power plant facility that is owned by the City of New Roads, but is operated by Louisiana Energy and Power Authority (LEPA). The New Roads Power Plant currently operates under Permit No. 2260-00057-V2, issued July 23, 2003.

**III. PROPOSED PROJECT/PERMIT INFORMATION**

**Application**

A permit application was submitted on January 7, 2008, requesting a renewal and minor modification of the Part 70 operating permit for the New Roads Power Plant. Additional information dated May 20, 2008 was also submitted.

---

**City of New Roads**  
**LA Energy & Power Authority (LEPA) - New Roads Power Plant**  
**New Roads, Pointe Coupee Parish, Louisiana**  
**Agency Interest Number: 26328**

**Project**

With this modification LEPA proposes to speciate the VOCs and update emissions based off of more accurate AP-42 emission factors.

**Proposed Permit**

Permit 2260-00057-V3 will be the renewal of Part 70 operating permit 2260-00057-V2 for the New Roads Power Plant.

**Permitted Air Emissions**

Estimated emissions in tons per year are as follows:

Pollutant	Before	After	Change
PM <sub>10</sub>	4.15	4.09	- 0.06
SO <sub>2</sub>	30.79	30.79	-
NO <sub>x</sub>	180.92	195.07	+ 14.15
CO	70.70	70.71	+ 0.01
VOC	12.21	4.49	- 7.72
TSP	4.90	4.82	- 0.08

VOC LAC 33:III. Chapter 51 Toxic Air Pollutants TAP's	Emissions in Tons per year
Benzene	0.047
Toluene	0.017
Xylenes	0.012
Formaldehyde	0.005
Acetaldehyde	0.001
Naphthalene	0.004
Total TAP's	0.085

**IV. REGULATORY ANALYSIS**

The applicability of the appropriate regulations is straightforward and provided in the Specific Requirements section of the proposed permit. Similarly, the Monitoring, Reporting and Recordkeeping necessary to demonstrate compliance with the applicable terms, conditions and standards are also provided in the Specific Requirements section of the proposed permit.

**City of New Roads**  
**LA Energy & Power Authority (LEPA) - New Roads Power Plant**  
**New Roads, Pointe Coupee Parish, Louisiana**  
**Agency Interest Number: 26328**

**Applicability and Exemptions of Selected Subject Items**

<b>Explanation for Exemption Status or Non-Applicability of a Source</b>		
<b>ID No:</b>	<b>Requirement</b>	<b>Notes</b>
UNF1 Facility wide	Chemical Accident Prevention and Minimization of Consequences (LAC 33:III. Chapter 59)	DOES NOT APPLY - Threshold quantities are not exceeded
	Chemical Accident Prevention Provision 40 CFR 68	DOES NOT APPLY - Threshold quantities are not exceeded
C1, C2, C3, C4, C5, and C6 Diesel Engines	Acid Rain Program (40 CFR 72)	DOES NOT APPLY - Name plate ratings are <25 MW
	Emission Standards for Sulfur Dioxide (LAC 33:III.1503)	EXEMPT – Facility emits less than 100 TPY of sulfur compounds measured as SO <sub>2</sub> and is exempt from both the 2000 ppmv limitation established by 1503.C and the continuous emissions monitoring requirement of 1511.A
	40 CFR 64 – Compliance Assurance Monitoring	DOES NOT APPLY – Sources do not use control devices to achieve compliance with an emission limitation or standard. 64.2(a)(2)
	NSPS Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	DOES NOT APPLY – Engines manufactured before 2007

**City of New Roads**  
**LA Energy & Power Authority (LEPA) - New Roads Power Plant**  
**New Roads, Pointe Coupee Parish, Louisiana**  
**Agency Interest Number: 26328**

Explanation for Exemption Status or Non-Applicability of a Source		
ID No:	Requirement	Notes
X1, X2, X3, X4, X5, and X6 Cooling Towers	40 CFR 63 Subpart Q – Industrial Process Cooling Towers	DOES NOT APPLY – Cooling Towers will not use chromium-based water treatment chemicals

The above table provides explanation for both the exemption status or non-applicability of a source cited by 1, 2 or 3 in the matrix presented in Section X (Table 1) of this permit.

**City of New Roads  
LA Energy & Power Authority (LEPA) - New Roads Power Plant  
New Roads, Pointe Coupee Parish, Louisiana  
Agency Interest Number: 26328**

**Prevention of Significant Deterioration/Nonattainment Review**

PSD does not apply.

**Streamlined Equipment Leak Monitoring Program**

<b>Unit or Plant Site</b>	<b>Program Being Streamlined</b>	<b>Stream Applicability</b>	<b>Overall Most Stringent Program</b>
New Roads Power Plant	-	-	-

**MACT Requirements**

MACT does not apply.

**Air Quality Analysis**

Dispersion Model Used: AERMOD

<b>Pollutant</b>	<b>Time Period</b>	<b>Calculated Maximum Ground Level Concentration</b>	<b>Louisiana Toxic Air Pollutant Ambient Air Quality Standard or (National Ambient Air Quality Standard {NAAQS})</b>
NOx	Annual	21.0 µg/m <sup>3</sup>	100 µg/m <sup>3</sup>

**General Condition XVII Activities**

The facility will comply with the applicable General Condition XVII Activities emissions as required by the operating permit rule. However, General Condition XVII Activities are not subject to testing, monitoring, reporting or recordkeeping requirements. For a list of approved General Condition XVII Activities, refer to the Section VIII – General Condition XVII Activities of the proposed permit.

**Insignificant Activities**

All Insignificant Activities are authorized under LAC 33:III.501.B.5. For a list of approved Insignificant Activities, refer to the Section IX – Insignificant Activities of the proposed permit.

**V. PERMIT SHIELD**

A permit shield was not requested.

**City of New Roads**  
**LA Energy & Power Authority (LEPA) - New Roads Power Plant**  
**New Roads, Pointe Coupee Parish, Louisiana**  
**Agency Interest Number: 26328**

## **VI. PERIODIC MONITORING**

Stack tests for nitrogen oxides and carbon monoxide are to be performed on Diesel Engine C1 (EQT 1) and Diesel Engine C6 (EQT 6) every 5 years, plus or minus 6 months of when the respective previous stack tests were performed.

## **VII. GLOSSARY**

Carbon Monoxide (CO) – A colorless, odorless gas, which is an oxide of carbon.

Maximum Achievable Control Technology (MACT) – The maximum degree of reduction in emissions of each air pollutant subject to LAC 33:III.Chapter 51 (including a prohibition on such emissions, where achievable) that the administrative authority, upon review of submitted MACT compliance plans and other relevant information and taking into consideration the cost of achieving such emission reduction, as well as any non-air-quality health and environmental impacts and energy requirements, determines is achievable through application of measures, processes, methods, systems, or techniques.

Hydrogen Sulfide (H<sub>2</sub>S) – A colorless inflammable gas having the characteristic odor of rotten eggs, and found in many mineral springs. It is produced by the reaction of acids on metallic sulfides, and is an important chemical reagent.

New Source Review (NSR) – A preconstruction review and permitting program applicable to new or modified major stationary sources of air pollutants regulated under the Clean Air Act (CAA). NSR is required by Parts C ("Prevention of Significant Deterioration of Air Quality") and D ("Nonattainment New Source Review").

Nitrogen Oxides (NO<sub>x</sub>) – Compounds whose molecules consist of nitrogen and oxygen.

Organic Compound – Any compound of carbon and another element. Examples: Methane (CH<sub>4</sub>), Ethane (C<sub>2</sub>H<sub>6</sub>), Carbon Disulfide (CS<sub>2</sub>)

Part 70 Operating Permit – Also referred to as a Title V permit, required for major sources as defined in 40 CFR 70 and LAC 33:III.507. Major sources include, but are not limited to, sources which have the potential to emit:  $\geq 10$  tons per year of any toxic air pollutant;  $\geq 25$  tons of total toxic air pollutants; and  $\geq 100$  tons per year of regulated pollutants (unless regulated solely under 112(r) of the Clean Air Act) (25 tons per year for sources in non-attainment parishes).

PM<sub>10</sub> – Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by the method in Title 40, Code of Federal Regulations, Part 50, Appendix J.

**City of New Roads  
LA Energy & Power Authority (LEPA) - New Roads Power Plant  
New Roads, Pointe Coupee Parish, Louisiana  
Agency Interest Number: 26328**

Potential to Emit (PTE) – The maximum capacity of a stationary source to emit any air pollutant under its physical and operational design.

Prevention of Significant Deterioration (PSD) – A New Source Review permitting program for major sources in geographic areas that meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. PSD requirements are designed to ensure that the air quality in attainment areas will not degrade.

Sulfur Dioxide (SO<sub>2</sub>) – An oxide of sulfur.

Sulfuric Acid (H<sub>2</sub>SO<sub>4</sub>) – A highly corrosive, dense oily liquid. It is a regulated toxic air pollutant under LAC 33:III.Chapter 51.

Title V Permit – See Part 70 Operating Permit.

Volatile Organic Compound (VOC) – Any organic compound, which participates in atmospheric photochemical reactions; that is, any organic compound other than those, which the administrator of the U.S. Environmental Protection Agency designates as having negligible photochemical reactivity.